

REMARKS

Claims 1-15 have been canceled without prejudice or disclaimer. New claims 16-27 have been added. Accordingly, claims 16-27 are currently pending in the application.

PRIORITY

Applicants appreciate the Examiner's acknowledgment of the claim for priority. Submitted herewith is a certified copy of the corresponding Japanese patent application (JP 11-322118, filed November 12, 1999). An indication that this document has been safely received would be appreciated.

35 U.S.C. §112

The rejection of claims 1-10 under 35 USC §112, second paragraph, has been rendered moot by the cancellation of claims 1-10 without prejudice or disclaimer. It is submitted that the new claims satisfy the requirements of 35 USC §112.

35 U.S.C. §§102 and 103

Claims 1, 6 and 11 stand rejected under 35 USC §102(b) as being anticipated by Man-Hak Tso. Claims 2 and 12 stand rejected under 35 USC §103(a) as being unpatentable over Man-Hak Tso in view of Nagai et al. Claims 3-4, 8-10 and 13-14 stand rejected under 35 USC §103(a) as being unpatentable over Man-Hak Tso in view of Roth. Claim 5 stands rejected under 35

USC §103(a) as being unpatentable over Man-Hak Tso in view of Tamura. Claim 7 stands rejected under 35 USC §103(a) as being unpatentable over Man-Hak Tso. Finally, claim 15 stands rejected under 35 USC §103(a) as being unpatentable over Poland et al in view of DeTemple et al.

All of the previously pending claims have been canceled without prejudice or disclaimer in favor of new claims 16-27. It is submitted that new claims 16-27 patentably define the present invention over the cited art. The present invention has several novel features including but not limited to Novel Features (1), (2) and (3) enumerated below:

According to Novel Feature (1), the attribute data correction method of the present invention is applied to a distribution system having a plurality of elements each including a computation device and a storage device. The attribute data correction method is performed by at least one of the plurality of elements, wherein attribute data indicating an attribute of at least one element is stored in the storage device of the element itself.

In particular, as shown in Fig. 1, the plurality of elements each including a computation device and a storage device may be IC tags, each of which corresponds to each of the products to such as soft drink cans, perishable food products, etc. Therefore, the number of elements in the present invention can be extremely large. Since each of the

IC tags 3 are attached to each consumer product, the system according to the present invention can be flexible enough to tolerate and entry/withdrawal of each element. This attribute data corresponds to information such as price 12, effective term 13, and standard price 14, as shown in Fig. 2. This attribute data can be easily changed and therefore the present invention provides high flexibility in changing the contents of the attribute data.

According to Novel Feature (2), an element at issue can receive (communication function) attribute data from at least another one of the plurality of elements and can determine (processing function) a content of the attribute data to be held (communication function) by the element itself based upon the attribute data received from the other element. The content of the attribute data stored (storing function) in the storage device is corrected to coincide with the determined content of the attribute data. This element at issue can be any one of the plurality of elements since all of them can be equivalently functioned. Such commonly owned functions can be, as specifically mentioned above, a communication function, a processing function or a storing function, etc. This versatility of functions improves the reliability in keeping data coincident among the contents of the elements that are to be coincident. Therefore, even if occasionally an element to

be corrected cannot be communicated to directly from another element, it can be communicated through other elements.

Another point of Novel Feature (2) is that all data is treated uniformly as attribute data and distinctions as to the kind of data (master data versus duplicate data) as disclosed in the specification are eliminated (see specification, page 2, lines 24-25, page 3, lines 12-13 and page 4, lines 13-14). It is also another advantage of this feature that the data coincidence among the contents of the elements are kept coincident without redundancy of elements (see specification, page 3, lines 2-4 and page 4, lines 14-15).

According to Novel Feature (3), the determined content of the attribute data is notified to at least another one of the plurality of elements which has sent attribute data to the one element itself. This feature guarantees that the coincidence data is constantly updated to each element thereby keeping the data coincident among the contents of the elements that are to be coincident.

On the other hand, Man-Hak Tso discloses a method and apparatus for synchronizing a first set of data with a second set of data. The synchronization means is a process by which two or more different sets of data from one or more different applications are made semantically equivalent (see column 1, lines 12-26). Examples of such a synchronizing system are shown by reference to the synchronization of phone book

records, appointment book records, logical text blocks, pictures, tables or graphs in a Word document or an Excel spreadsheet, etc. (see column 4, lines 12-22).

Fig. 2 of Man-Hak Tso show the synchronization of two sets of data D0 and D1. At time T0, data set D0 has records A, B, C and D while data set D1 also has similar records A, B, C and D. At time T1, the data sets D0 and D1 have been independently modified to result as data sets D0' and D1'. The resulting data set D0' has records E, B, C and D while data set D1' has records A, B, C and F. At time T2, after synchronization, both D0' and D1' are unified to E, B, C and F, thereby reflecting modification of both records A-E and D-F. In other words, the synchronization taught by Man-Hak Tso is based upon the principle of modifying to the newest records (see column 3, lines 66 to column 4, line 22).

However, according to Novel Feature (1) of the present invention, the distribution system can be applied to a sophisticated distribution system in which each of a plurality of elements can use IC tags, etc., in retail stores. The present invention enables a highly flexible distribution system to be tolerant enough to permit entry/withdrawal of each element. On the other hand, the synchronization system of Man-Hak Tso is based upon a centralized processing system. Thus, Man-Hak Tso does not realize the effects of enabling a

highly flexible distribution system that is tolerant enough to permit the entry/withdrawal of each element.

With respect to Novel Features (2) and (3), the element at issue can be any one of a plurality of elements since each element in the large number of elements can be equivalently functioned. According to Novel Feature (2) of the present invention, attribute data is determined based upon the received content of the attribute data and the stored content of the corresponding attribute data. On the other hand, Man-Hak Tso permits the received content of the attribute data to be D1' (i.e., having records A, B, C and F) and the stored contents of the corresponding attribute data to be D0' (having records E, B, C and D). In this case, records B and C are the same and records A and D are different. The determination of these different records can be performed in any number of versatile ways as specifically recited in dependent claims 2-12 (for example, according to the majority rule as recited in claims 6, 7 and 11, or introducing a significance level as recited in claims 7, 11 and 12, for example). Therefore, the principle of determining coincidence is not limited to modifying the newest records as taught by Man-Hak Tso.

The coincidence determination according to the present invention is based upon the received contents of the attribute data, which may have been provided with no content but may be created upon receiving contents of the attribute data. On the

other hand, the synchronization of Man-Hak Tso is directed to a concept which may be expressed with semantically equivalent data.

The deficiencies in the primary reference to Man-Hak Tso are not overcome by resort to the remaining references. For example, Nagai et al merely discloses the majority rule. Also, Roth is applied by the Examiner for the teaching of the majority rule using a significance level. It is submitted that the pending claims patentably define the present invention over the cited art.

Conclusion

In view of the foregoing amendments and remarks, Applicants contend that the above-identified application is in condition for allowance. Accordingly, reconsideration and reexamination are respectfully requested.

Respectfully submitted,  
  
Shrinath Malur  
Registration No. 34,663  
Attorney for Applicant(s)

MATTINGLY, STANGER & MALUR  
1800 Diagonal Rd., Suite 370  
Alexandria, Virginia 22314  
(703) 684-1120  
Date: March 31, 2004